

## How to connect to SAFE from Linux

The University of Bergen have standardized on Ubuntu for Linux clients.

### Installing required software on Ubuntu

In order to install Cisco AnyConnect on Ubuntu Linux, you must first download the software and the profile containing the correct settings needed to connect to the secure desktop in SAFE. ***NB! You need sudo-rights to be able to complete this task.***

You can download the required files from the following site: <https://tjinfo.uib.no/program/>. The files are listed under the category "Safe". Download the following files:

- anyconnect-linux64-x.y.zzzzz-predeploy-k9.tar.gz, x, y and z represent the version and varies
- Tilgang\_Terminalserver.zip

After downloading, you can unpack the files using the following commands:

```
tar xzf anyconnect-linux64-4.4.03034-predeploy-k9.tar.gz -C /tmp
unzip Tilgang_Terminalserver.zip;mv Tilgang_Terminalserver.xml /tmp
```

Here /tmp has been chosen as the directory, but you are free to unpack in your directory of choice. If the directory doesn't already exist, you will have to create it first.

You now have a directory and a file under /tmp:

```
anyconnect-linux64-x.y.zzzzz
Tilgang_Terminalserver.xml
```

If you change directory to /anyconnect-linux64-x.y.zzzzz/vpn, you can start the installation. ***You should at this point become root or use sudo before relevant commands.***

```
sudo ./vpn_install.sh
```

The software will be installed in the following directory: /opt/cisco/anyconnect

In order to apply the profile for SAFE, move Tilgang\_Terminalserver.xml to the following directory: /opt/cisco/anyconnect/profile/. From the /tmp directory, use the following command:

```
sudo mv Tilgang_Terminalserver.xml /opt/cisco/anyconnect/profile/
```

Cisco AnyConnect is now installed. The next step is to install the remote desktop client.

Our remote desktop client of choice is FreeRDP. To install the software, run the following command:

```
Sudo apt-get install -y freerdp-x11
```

### Connecting to the secure desktop from Ubuntu

To start the software you need from Ubuntu, run the following command:

```
/opt/cisco/anyconnect/bin/vpnui
```

A window will appear asking for your credentials. After you enter username and password, you will be asked for a one-time code. You should have received this code on your smart phone, either as a text message or in an app.

To start the remote desktop app, run the following command:

```
xfreerdp -u <brukernavn> -g 1680x1050 -k no <servernavn>.uib.no
```

<username> should be replaced by your University of Bergen username and <servername> should be replaced by the name of your secure desktop. -g 1680x1050 refers to the resolution (size) of your windows. You can choose a different resolution if you wish.